to a substantially horizontal substrate, said composition consisting essentially of a calcium sulphate alpha-hemihydrate plaster and an aqueous resin emulsion capable of forming a hard continuous resin film on removal of water, said resin being a styrene/alkyl acrylate copolymer and having a Rocker hardness of about 10% to about 45% and being in a stable emulsified finely divided form, the relative proportions of the plaster and the resin being such that the plaster takes up the major part of the water in the emulsion when it sets, the proportion of dry resin solids being from 10% to 35% by weight based on the weight of dry plaster solids and the amount of water present being from 15% to 35% by weight based on the weight of dry plaster solids, and allowing said composition to set over a period of time.

6. A process according to claim **5,** wherein the resin emulsion has a resin particle size of 0.1 to 1.5 microns.

7. A process for making a set composition which comprises providing a self-levelling and self-smoothing fluid plaster composition capable of flowing under its own weight to give a smooth flat surface when applied to a substantially horizontal substrate, said composition consisting essentially of a calcium sulphate alpha-hemihydrate plaster and an aqueous resin emulsion capable of forming a hard continuous resin film on removal of water, said resin being a polymer of an ethylenically unsaturated monomer and having a Rocker hardness of about 10% to about 45% and being in a stable emulsified finely divided form, the relative proportions of the plaster and the resin being such that the plaster takes up the major part of the water in the emulsion when it sets, the proportion of dry resin solids being from 10% to 35% by weight based on the weight of dry plaster solids and the amount of water present being from 15% to less than 30% by weight based on the weight of dry plaster solids, and allowing said composition to set over a period of time.

8. A process according to claim **7,** wherein the resin is selected from the group consisting of homopolymers of (1) alkyl acrylates and methacrylates in which the alkyl group has up to 12 carbon atoms, (2) vinyl acetate and (3) styrene and copolymers of (1), (2) and (3).

9. A process for making a set composition which comprises providing a self-levelling and self-smoothing fluid plaster composition capable of flowing under its own weight to give a smooth flat surface when applied to a substantially horizontal substrate, said composition consisting essentially of a calcium sulphate alpha-hemihydrate plaster and an aqueous resin emulsion capable of forming hard continuous resin film on removal of water, said resin having a Rocker hardness of about 10% to about 45% and being in a stable emulsified finely divided form, said resin being selected from the group consisting of homopolymers of (i) alkyl acrylates and methacrylates in which the alkyl group has up to twelve carbon atoms, (ii) vinyl acetate and (iii) styrene, copolymers of (i), (ii) and (iii) and mixtures of said homopolymers and copolymers, the proportion of dry resin solids being from 10% to 35% by weight based on the weight of dry plaster solids and the amount of water present being from 15% to 24% by weight based on the weight of dry plaster solids, and allowing said composition to set over a period of time, whereby the plaster takes up substantially all of the water in the emulsion when it sets.

10. A process according to claim **9** wherein the resin is a styrene/alkyl acrylate copolymer.

11. A process for making a set composition which comprises providing a self-levelling and self-smoothing fluid plaster composition capable of flowing under its own weight to give a smooth flat surface when applied to a substantially horizontally substrate, said composition consisting essentially of a calcium sulphate alpha-hemihydrate plaster and an aqueous resin emulsion, said resin being a polymer of an ethylenically unsaturated monomer and having a Rocker hardness of about 10% to about 45% and being in a stable emulsified finely divided form, the relative proportions of the plaster and the resin emulsion being such that the plaster takes up the major part of the water in the emulsion when it sets, the amount of water present being from 15% to 35% by weight based on the weight of dry plaster solids and the dry weight of resin solids being 3% to **10%** by weight of the dry plaster solids, and allowing said composition to set over a period of time.

12. A process according to claim **11,** wherein the amount of water present is less than 30% by weight based on the weight of dry plaster solids.

13. A process according to claim **12** wherein the amount of water present is from 15% to **24%** by weight based on the weight of dry plaster solids.

14. A process according to claim **12,** wherein the resin is selected from the group consisting of homopolymers of (1) alkyl acrylates and methacrylates in which the alkyl group has up to 12 carbon atoms, (2) vinyl acetate and (3) styrene and copolymers of (1(2) and (3).

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